

AD-A263 023



## DOCUMENTATION PAGE

Form Approved

GSA No. 0104-0128

①

This estimated average price per page is based on the price of the document as published in the NTIS catalog. It does not include the cost of the document as published in the NTIS catalog. It does not include the cost of the document as published in the NTIS catalog. It does not include the cost of the document as published in the NTIS catalog.

2. REPORT DATE  
OCTOBER 19903. REPORT TYPE AND DATES COVERED  
Final

## 4. TITLE AND SUBTITLE

A Cultural Resources Survey of the Proposed Class 1 Levee  
East of the City of Grubbs, Jackson Co., AR

## 5. FUNDING NUMBERS

96Y3112

## 6. AUTHOR(S)

Tim Mulvihill

## 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

Sponsored Research Program  
Arkansas Archaeological SurveyDTIC  
APR 19 19938. PERFORMING ORGANIZATION  
REPORT NUMBER

## 9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

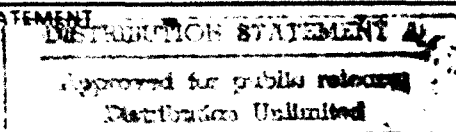
Dept. of the Army  
Memphis District Corps of Engineers  
B-202 Clifford Davis Federal Bldg.  
Memphis, TN 3810310. SPONSORING/MONITORING  
AGENCY REPORT NUMBER

234

## 11. SUPPLEMENTARY NOTES

## 12a. DISTRIBUTION/AVAILABILITY STATEMENT

Unlimited

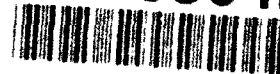


## 12b. DISTRIBUTION CODE

## 13. ABSTRACT (Maximum 200 words)

Two sites 3JA598 and 3JA599, were discovered during the survey. Test excavations were conducted at these sites on August 16 & 17, 1990. The purpose of these investigations was to determine whether the prehistoric sites were eligible for nomination to the National Register of Historic Places and if intact deposits were present within the project right-of-way.

93-08042



182d

93 4 16 104

## 14. SUBJECT TERMS

## 15. NUMBER OF PAGES

19

## 16. PRICE CODE

17. SECURITY CLASSIFICATION  
OF REPORT18. SECURITY CLASSIFICATION  
OF THIS PAGE19. SECURITY CLASSIFICATION  
OF ABSTRACT

## 20. LIMITATION OF ABSTRACT

PHASE TWO TESTING FOR SITES DISCOVERED  
AT THE PROPOSED CLASS I LEVEE  
EAST OF THE CITY OF GRUBBS  
JACKSON COUNTY, ARKANSAS

By

Tim Mulvihill

Submitted to: Corps of Engineers, Memphis District  
B-202 Clifford Davis Federal Building  
Memphis Tennessee 38103-1894

Submitted by: Sponsored Research Program  
Arkansas Archeological Survey  
P.O. Box 1249  
Fayetteville, AR 72702-1249

AAS Project No. 748

Draft Report

September 20, 1990

# ABSTRACT

Test excavations were conducted by the Sponsored Research Program of the Arkansas Archeological Survey at two sites near Grubbs, Arkansas. The purpose of these investigations was to determine whether the prehistoric sites were eligible for nomination to the National Register of Historic Places and if intact deposits were present within the right-of-way of a proposed Class 1 Levee around the City of Grubbs. Testing at 3JA598 revealed intact subplowzone features probably dating to the Late Woodland period and therefore the site is eligible for nomination to the National Register. Any subsurface impacts to this area of the right-of-way should be mitigated through archeological excavation. Test units at 3JA599 revealed no undisturbed, intact archeological remains and the site is therefore not eligible for nomination to the National Register and construction in this area may proceed.

DTIC QUALITY INSPECTED 4

Accession For	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
Distribution/	
Availability Codes	
and/or	
Dist	Special
A-1	

## TABLE OF CONTENTS

ABSTRACT	i
LIST OF FIGURES	ii
LIST OF TABLES	ii
INTRODUCTION	1
TESTING OF 3JA598	1
RESULTS OF TESTING	3
TESTING OF 3JA599	7
RESULTS OF TESTING	7
CONCLUSIONS	9
REFERENCES CITED	12

## LIST OF FIGURES

- Figure 1. Map of 3JA598
- Figure 2. 3JA598 Test Unit 1 East Wall Profile
- Figure 3. 3JA598 Backhoe Trench Profile
- Figure 4. Map of 3JA599
- Figure 5. 3JA599 Test Unit 1 West Wall Profile

## LIST OF TABLES

- Table 1. 3JA598 - Artifacts from 1 x 2 m Test Unit
- Table 2. 3JA598 - Artifacts from Surface
- Table 3. 3JA598 - Artifacts from Feature 1
- Table 4. 3JA599 - Artifacts from 1 x 2 m Test Unit
- Table 5. 3JA599 - Artifacts from 50 cm x 50 cm Test Units
- Table 6. 3JA599 - Artifacts from Surface

## INTRODUCTION

On July 6, 1990 two sites (3JA598 and 3JA599) were located during a cultural resources survey of the project area associated with the planned construction of a Class 1 levee around the City of Grubbs. On August 16 and 17, 1990 these sites were tested to determine if intact cultural deposits were present and to assess the sites in terms of National Register of Historic Places eligibility criteria. The proposed levee would be built along the existing treeline using fill from the area inside and immediately adjacent to the levee. The planned construction right-of-way has an average width of 31.5 meters and a maximum width of 41.1 meters extending out from the treeline.

## ARCHEOLOGICAL TESTING AND RESULTS

### 3JA598

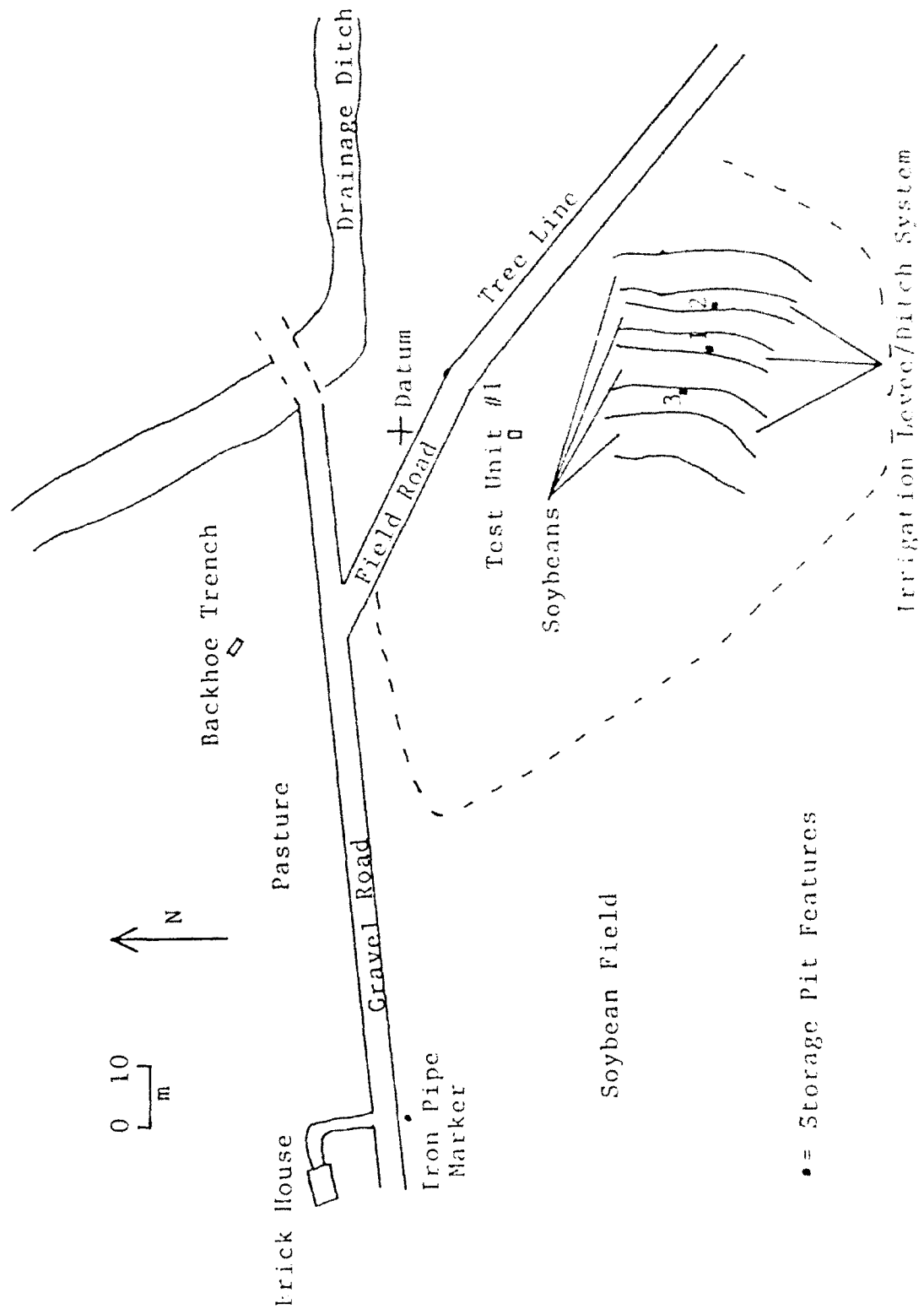
3JA598 is a prehistoric site located approximately 792 meters west of the Cache River. The surface scatter associated with the site measures approximately 100m northwest to southeast and extends west 40m from the treeline. At the time the site was originally located (early July), it had just been planted in soybeans. At the time of the site testing, the soybeans were approximately 60cm high and irrigation levees had been constructed in the field.

Under these circumstances, it was decided that a 1x2m test unit would be placed at the northeast corner of the site in an area of low soybean plant density (Figure 1). The test unit was excavated in natural stratigraphic levels and screened through 1/4 inch hardware cloth. A 2m backhoe trench was dug immediately north of the site in a pasture. The backhoe trench would 1) indicate if the site extended to the north (which previous shovel testing indicated was negative) and 2) would provide a stratigraphic profile of the site area.

While completing these tests, we were visited by Robert David Williams who lives only a few hundred meters from the site. Williams, an artifact collector, provided us with further information regarding the history of this site. He stated that he had not only collected projectile points from the surface, but had also dug small areas of this site. While digging he encountered several "dark areas" which contained shell, animal bone and broken pottery. He indicated that one of these areas extended down approximately 70cm below the surface. He also stated that he had never encountered any human burials and that the year before the farmer had scraped approximately 10 inches (25cm) of soil from the top of the ridge where the site is located. Williams felt that the main site locality was confined to the ridge itself. The landleveling activities of the farmer probably account

FIGURE 1

3JA598



for the large surface scatter of artifacts. Williams had only one projectile point which he knew for certain was picked up at this site. He kindly allowed us to photograph the point.

After talking with Williams, we began making a surface collection in the bean field by walking along the irrigation levees. In constructing the levees, soil was scraped from both sides of a path and piled in the middle to form a levee with shallow ditches on either side. In several areas we noticed that dark, midden-like soils had been thrown up onto the levees. Three of these areas were shovel-skimmed exposing dark circular storage/trash pits. Only portions of each pit could be examined without damage to the irrigation levees or the soybean plants. These three pit features ranged in diameter from 130cm to 150cm. Feature 2 extended 75cm below the bottom of the shallow ditch while Features 1 and 3 were 26cm and 25cm deep respectively. Artifacts visible at the surface of these features included shell, animal bone, broken ceramics, lithics and charcoal. No attempt was made to excavate any of the features, but they were cored to determine the depth below present ground surface.

#### Results of Testing

The backhoe trench to the north indicated that the site did not extend into this area. The exposed stratigraphy had a plowzone approximately 12cm in depth underlain by a friable A-horizon. Next was a heavy clay silt with a small amount of sand, then a sandy clay silt (see Figure 3). No cultural features or artifacts were present in the backhoe trench. The stratigraphy indicated that if any prehistoric subsurface features were present in this area, they would be visible at the bottom of the plowzone.

The 1x2m test unit contained only minimal artifacts from the plowzone. These included one broken projectile point tip, two broken bifaces, three small grog-tempered sherds, one core and several chert flakes and debitage (Table 1). No features were present at the bottom of the plowzone. The north one-half of the test unit was then excavated down to 35cm below surface (Figure 2). Artifacts recovered included only chert flakes and 1 fragment of historic glass.

Surface collections were also made between the rows of soybeans and along the irrigation levees. Artifacts included shell, sand and grog tempered ceramics, two small projectile points (Scallorns), one expanded-base projectile point, one biface, flakes, cores and two fragments of human bone (Table 2). Artifacts were also recovered from the very top of Feature 1 as it was troweled. These included one biface and three grog tempered ceramic sherds - one rim, one base and one body sherd (Table 3).

The diagnostic artifacts indicate that at least two occupations were present at this site. The plain shell tempered



FIGURE 2

3JA598

EAST WALL PROFILE

TEST UNIT #1

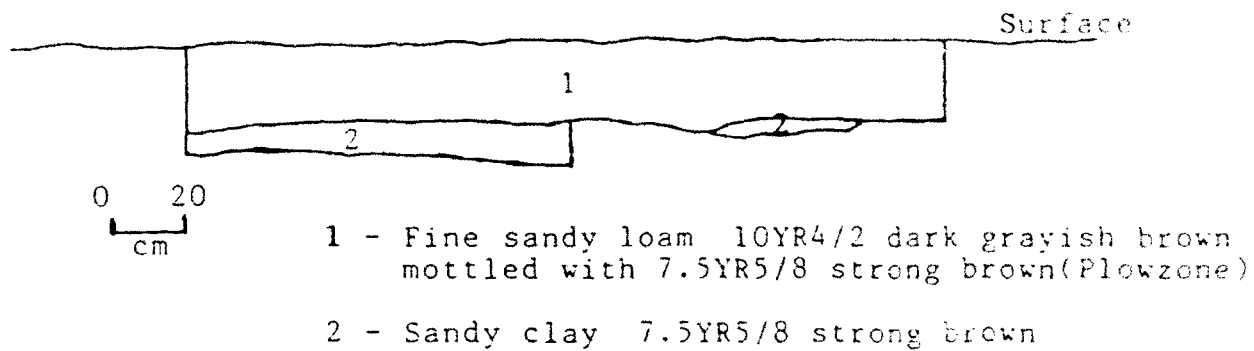
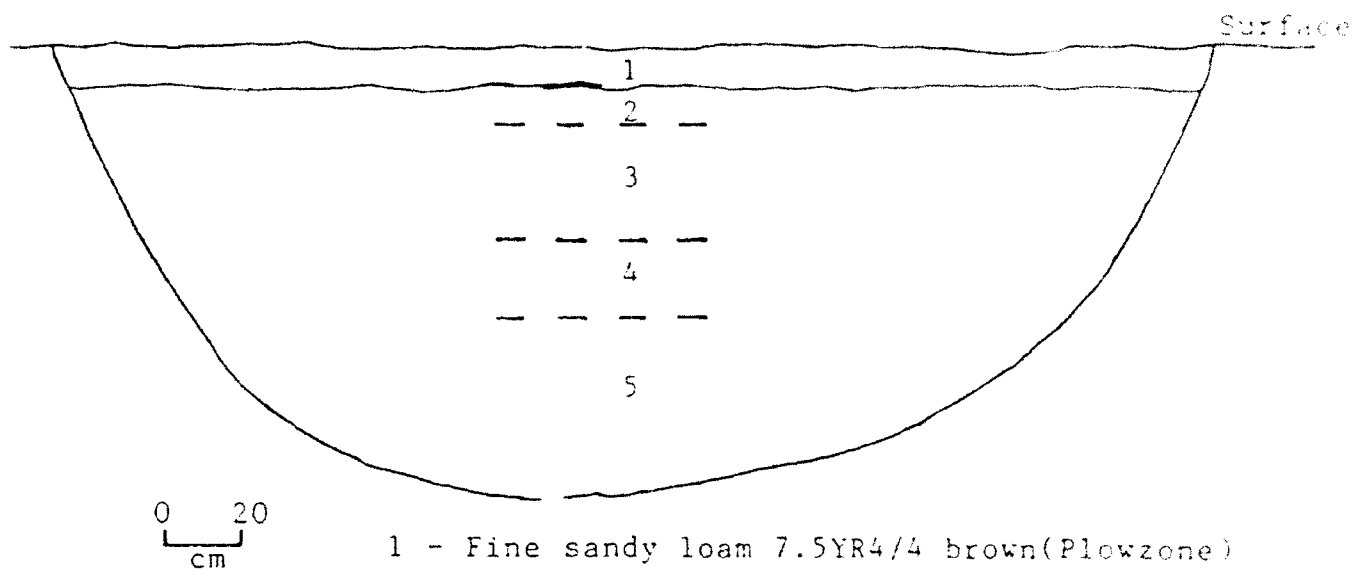


FIGURE 3

31A598

BACKHOE TRENCH

NORTH OF SITE



- 1 - Fine sandy loam 7.5YR4/4 brown (Plowzone)
- 2 - Sandy loam 7.5YR5/6 strong brown  
(A-horizon--old plowzone)
- 3 - Heavy clay silt w/ blocky structure and  
a little sand 7.5YR5/4 brown
- 4 - Sandy clay silt 10YR5/6 yellowish brown
- 5 - Sandy clay silt w/ more sand 10YR5/6

Table 1. 3JA598 - Artifacts from 1 x 2 m Test Unit

<u>Artifact</u>	<u>Material</u>	<u>Cultural Affiliation</u>	<u>Number</u>
Proj. Point Tip	Chert	--	1
Flakes	Chert	--	44
Core	Chert	--	1
Decortication flake	Chert	--	6
Biface fragment	Chert	--	2
Shatter	Chert	--	13
Unmodified stone	Sandstone	--	1
Pottery - body	Grog Tempered	Woodland	3
Clear glass	--	20th Cent. Hist.	1

Table 2. 3JA598 - Artifacts from Surface

<u>Artifacts</u>	<u>Material</u>	<u>Cultural Affiliation</u>	<u>Number</u>
Pottery-rim	Shell-temp.	Mississippian	1
Pottery-body	Shell-temp.	Mississippian	9
Pottery-body	Sand-temp.	Woodland	5
Pottery-body	Grog-temp.	Woodland	4
Scallorn point	Chert	Mississippian	2
Expanding based pt.	Chert	Woodland	1
Flake	Chert	--	10
Decortication flake	Chert	--	1
Flake	Novaculite	--	1
Biface fragment	Chert	--	2
Core	Chert	--	2
Cobble Tool	Sandstone	--	1
FCR	Sandstone	--	1
Unmodified stone	Sandstone	--	2
Parietal fragment	Human bone	--	1
Ilium fragment	Human bone	--	1

Table 3. 3JA598 - Artifacts from Feature 1

<u>Artifacts</u>	<u>Material</u>	<u>Cultural Affiliation</u>	<u>Number</u>
Pottery-base	Grog-temp.	Woodland	1
Pottery-rim	Grog-temp.	Woodland	1
Pottery-body	Grog-temp.	Woodland	1
Biface fragment	Chert	--	1

ceramics and the two Scallorn points indicate a possible Middle Period Mississippian occupation. The plain grog and sand tempered ceramics indicate a Woodland Period occupation - probably Baytown. The fact that some of the Baytown sherds were found in one of the storage pits indicates that the main occupation was probably Baytown, however, further excavations would be necessary to confirm this hypothesis.

Although approximately 25cm of soil have been removed from the top of this ridge, significant intact deposits in the form of storage/trash pits still exist which could provide needed data concerning the Woodland period in Northeast Arkansas. The Cache River survey provided some information concerning the Woodland Period, but this was mostly in the form of new site locations and artifacts obtained through surface collections (Schiffer and House 1975). Little is known of the Baytown period and most of the information has come from sites east of Crowley's Ridge (Morse and Morse 1983:192). For these reasons, mitigation of the site is recommended if any ground disturbing activities are to take place during the construction of the levee.

#### 3JA599

3JA599 is a prehistoric site located approximately 210m west of the Cache River. This site was originally located as a surface scatter of artifacts along a vegetation-free zone 12m wide between the treeline bordering the Cache River and a rice field. The surface scatter measured approximately 100m in length (Figure 4). At the time the site was tested, the rice field was flooded and could not be included in the testing. A 1x2m test unit was excavated near the middle of the surface scatter. The elevation was also slightly higher at this point. Thirty-three 50cm x 50cm shovel tests were also excavated every ten meters across the site in two parallel transects approximately eight meters apart. The 1x2m test unit and the shovel tests were all screened through 1/4 inch hardware cloth. Diagnostics were also collected from the surface.

#### Results of Testing

The 1x2m test unit produced only a few artifacts most of which were 20th Century historic materials (Table 4). Prehistoric artifacts included a few flakes, one biface fragment and one core. Only ten of the shovel tests produced artifacts - most of which were flakes (Table 5). Also found in the shovel tests were biface fragments, two projectile point tip fragments and one projectile point base fragment. Except for one fragment of recent historic iron in a disturbed area, all artifacts were found within the plowzone. No subplowzone cultural features were encountered in either the test unit or the shovel tests. The only whole diagnostic artifact, a Nodena point, was found on the surface (Table 6).

From the previous surface collection it was determined that

Table 4. 3JA599 - Artifacts from 1 x 2 m Test Unit

<u>Artifacts</u>	<u>Material</u>	<u>Cultural Affiliation</u>	<u>Number</u>
Flake	Novaculite	--	1
Flake	Chert	--	47
Biface fragment	Chert	--	1
Core	Chert	--	1
Clear glass	--	20th Cent. Hist.	4
Ceramics	Whitewear	20th Cent. Hist.	3

Table 5. 3JA599 - Artifacts from 50 cm x 50 cm Test Units

<u>Artifacts</u>	<u>Material</u>	<u>Cult. Affiliation</u>	<u>Unit</u>	<u>Number</u>
Flake	Chert	--	3	1
Flake	Chert	--	6	4
Flake	Chert	--	22	1
Projectile pt. tip	Chert	--	8	1
Biface fragment	Chert	--	9	1
Flake	Chert	--	25	2
Projectile pt. base	Chert	--	25	1
Flake	Chert	--	27	2
Biface fragment	Chert	--	27	1
Shatter	Chert	--	28	1
Decortication flake	Chert	--	13	1
Unidentified	Iron	20th C. Hist.	15	1
Flake	Chert	--	15	1

Table 6. 3JA599 - Artifacts from Surface

<u>Artifacts</u>	<u>Material</u>	<u>Cultural Affiliation</u>	<u>Number</u>
Biface fragment	Chert	--	6
Drill fragment	Chert	--	1
Projectile pt. base	Chert	--	1
Nodena Point	Chert	Late Mississippian/ Protohistoric	1
Flake	Chert	--	18
Ceramic	Creamware	20th Cent. Hist.	1
Cobble tool	Sandstone	--	2

this site could be either Archaic or Woodland in age. Nothing discovered during the testing of this site suggests any change in this cultural affiliation except for the Nodena point. This area is thought to have been devoid of permanent settlements during the Late Period Mississippian (of which the Nodena point is diagnostic), but it would not be unusual to find isolated Nodena points from hunting trips into this region (Morse and Morse 1983). Recently, another Nodena point was found approximately eight miles north of this site, also along the Cache River. If permanent villages did exist at that time in this region, then one would also expect to find the ceramics and other artifacts typical of that period.

Considering the low artifact density and the lack of intact subplowzone cultural deposits, it is believed that this site can add little data to prehistoric research in this area. Although part of the site probably existed within the present confines of the rice field, the farming practices associated with rice farming are not conducive to site preservation. Any deposits that may be within the rice field are most likely highly disturbed. For these reasons, no further archeological work is recommended for 3JA599 and levee construction may proceed.

#### CONCLUSIONS

Two sites, 3JA598 and 3JA599, were tested in order to determine their significance in relation to eligibility criteria for the National Register of Historic Places. The sites were tested using a series of 1x2m test units, 50cm x 50cm shovel tests and a backhoe trench in the case of 3JA598. Findings at 3JA599 indicated that 1) no subplowzone cultural features were present at the site 2) no defined concentrations of artifacts existed within the plowzone 3) any cultural remains located within the rice field are probably highly disturbed. No further archeological work is recommended for 3JA599.

Testing results at 3JA598 indicate that the site was occupied during at least two different cultural periods. The main occupation was a Late Woodland farmstead or small hamlet based on the intact storage pit features discovered during testing. Mitigation of any impacts to this site is recommended because 1) little is known of this cultural period in Northeast Arkansas 2) intact subsurface deposits are present which contain ceramic and lithic artifacts, faunal remains and possible floral remains. However, if the City of Grubbs avoids disturbing the area around 3JA598 by alternating their construction plans, then the SRP will recommend that no further work is necessary.

FIGURE 4

3JA599

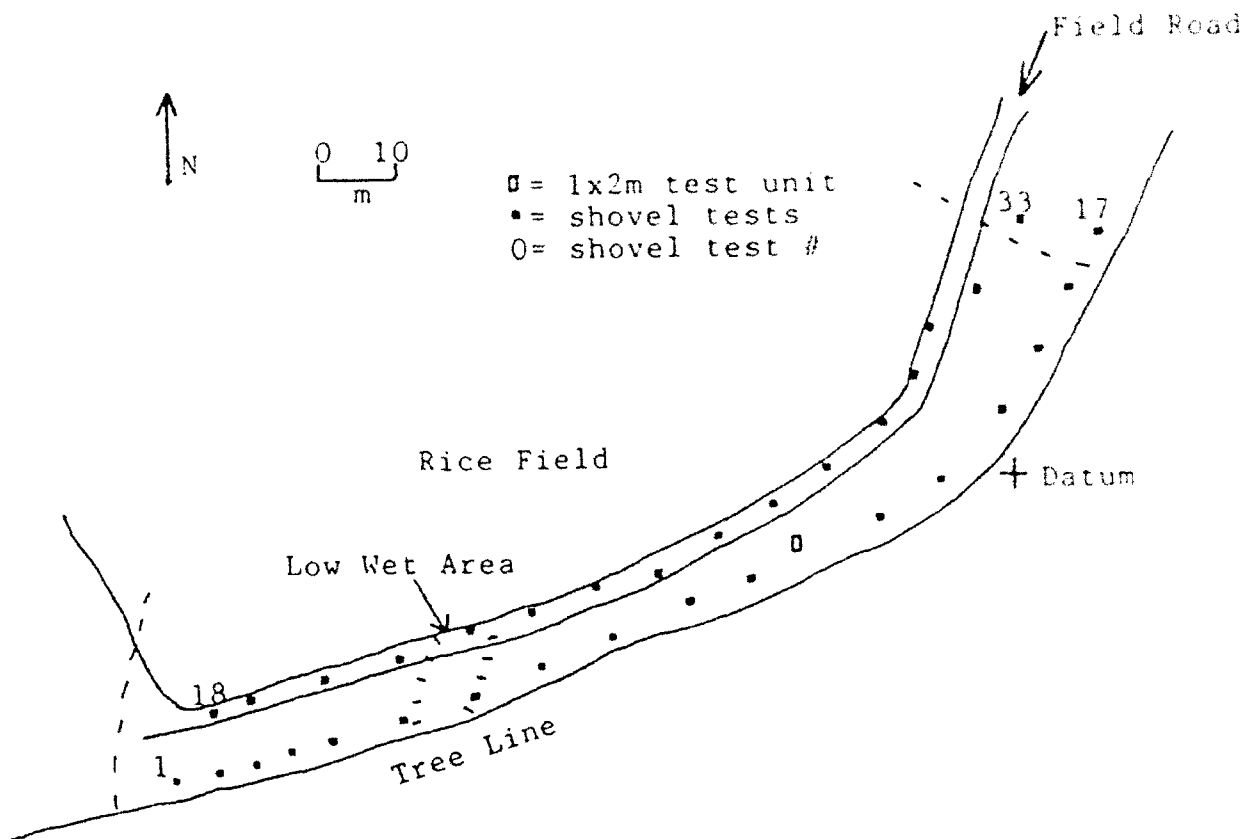
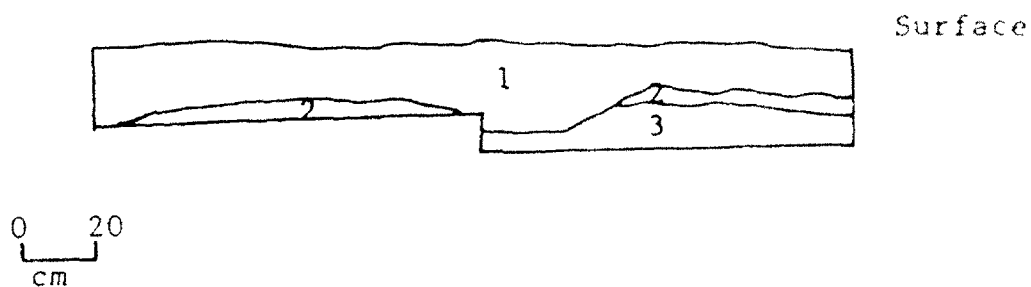


FIGURE 5

31A599

WEST WALL PROFILE

TEST UNIT #1



- 1 - Fine sandy loam - friable 10YR4/3 brown  
(Plowzone)
- 2 - Sandy loam - some mottling; interbedded with  
manganese concretions; noticeable lensing  
10YR6/1 light gray (Former plowzone)
- 3 - Silt loam - very compact; little sand  
10YR5/4 yellowish brown



REFERENCES CITED

- Morse, Dan F., and Phyllis A. Morse  
1983 Archaeology of the Central Mississippi Valley, Academic Press, New York.
- Schiffer, Michael B., and John H. House, assemblers  
1975 The Cache River Archeological Project: An Experiment in Contract Archeology. Arkansas Archeological Survey, Research Series No. 8.